

REMARKS

Claims 1-28 are currently pending. The Examiner has rejected claims 1-28 as being unpatentable over U.S. Patent No.4,272,263 to Hancock. The following remarks are considered by applicant to overcome each of the Examiner's outstanding rejections. An early Notice of Allowance is therefore requested.

Claim 1

The determination of obviousness rests on whether the claimed invention as a whole would have been obvious to a person of ordinary skill in the art at the time the invention was made. In determining obviousness, four factors should be weighed: (1) the scope and content of the prior art, (2) the differences between the art and the claims at issue, (3) the level of ordinary skill in the art, and (4) whatever objective evidence may be present. Obviousness may not be established using hindsight or in view of the teachings or suggestions of the inventor. The Examiner carries the burden under 35 U.S.C. § 103 to establish a prima facie case of obviousness and must show that the references relied on teach or suggest all of the limitations of the claims.

The examiner contends that

“Hancock discloses an inlet flange to be used in a filter system comprising a **body (26)** capable of being **attached** to the filter medium (14) ..., a lip (see lip of item 26 in Fig. 2) located on the edges of the body to enable the body to be supported on a **filter housing (16)** and the lip comprising a first surface and second surface.... Hancock further discloses the flange (26) may be made of **metal, a thermoplastic, hard rubber or similar material ... which is very well-known in the art as sealing material**, therefore, the **sealing material located at the first and second surfaces or sealing material being and integral part of the lip** (which meets the requirements of claim 1 and claim 4).”

In particular, the Examiner points to the following for support for this position: Item 26 in Fig. 2; Col. 2, Ln. 65 – Col. 3, Ln. 8; Col. 3, Lns. 19-23; Col. 3, Lns. 2-3. Thus, the Examiner's reasons for rejecting seem to be two fold: (1) Hancock discloses a filter body with a **lip**, said **lip resting on the surface edge of the filter housing**; (2) Said lip having a **first surface** and a **second surface, both surfaces being made of a sealing material**. However, this misconstrues the teaching of Hancock.

First, item 26 is not the filter body as asserted by the Examiner. Rather, it is the annular shoulder of the venturi element 24. While venturi element 24 is described as being “included” in the filter arrangement 7 (Hancock, Col. 2, Ln. 65 – Col. 3, Ln. 8), the venturi

element 24 is not attached to the filter medium 14, but is instead held in place adjacent to filter medium 14 by pressure and can be manually removed separately from the filter medium. See Hancock, Figures 3-6 sequentially; Hancock, Col. 1, Lns. 45-56. Since the venturi element 24 is incapable of being attached to the filter medium, the venturi element cannot be a “body capable of being attached to filter medium” as set forth in Applicants’ claim 1.

Further, since venturi element 24 cannot be a body as recited in claim 1, annular shoulder 26 cannot be a “lip located on the edges of said body” as also recited by claim 1. Thus, Applicants respectfully assert that Examiner has not pointed to any lip of any body that would satisfy claim 1 of the current application.

Even if the annular shoulder 26 did disclose a lip, the annular shoulder 26 never rests on the plate aperture 16 (as Examiner contends), nor does it rest on the marginal edge 15 of the plate aperture 16, nor does it rest on the plate 4 itself. Instead, the annular shoulder 26 rests atop the band 19, which is a part of the ring member 13 and not a part of the filter housing. Hancock, Col. 3, Lns. 9-10. The diameter of the annular shoulder 26 is less than the diameter of the plate aperture 16 and thus is incapable of resting on the filter housing. Hancock, Col. 3, Lns. 17-23. Therefore, not only does Hancock fail to disclose a lip that rests on the surface edge of the filter housing, but by teaching a venturi member that is *smaller* than the plate aperture, Hancock actually teaches away from Applicants’ claim 1 limitation that the filter system include a lip with a first surface capable of resting on a surface edge of the housing.

In addition, the lip of annular shoulder 26 plays no part in the filter’s seal. Rather, it is the flanges 28 that create an outward, radial pressure against the ring member 13 thus creating the seal. Hancock, Col. 3, Lns. 12-17. The seal in Hancock is actually formed between the ring member 13 and the plate 4. Hancock, Col. 2, Lns. 53-59. The annular shoulder 26 rests on top of the ring member 13 and, thus, it does not contribute to any of the seal’s radial pressure and plays no part in the filters seal. As such, the annular shoulder 26 does not, either by itself or with the assistance of sealing material, “prevent fluids from passing between said lip and the housing and between said lip and the lid,” as recited in Applicants’ claim 1. Application, P. 15, Lns. 9-11 (Claim 1).

Examiner contends, since the venturi element 24 of Hancock is disclosed as being made of metal, a thermoplastic, hard rubber or similar material, that Hancock, therefore, discloses a sealing material at the first and second surfaces. Applicants respectfully disagree. Hancock’s venturi element 24, and thus annular shoulder 26, is not made of sealing material. The venturi element 24, of which annular shoulder 26 is a part, must be made of a rigid material to create the pressure seal with the ring member 13 and the marginal edge 15. This is illustrated by

the reference to **metal** and **hard** rubber. Hancock, Col. 3, Lns. 1-3. While Hancock does disclose that the venturi element 24 can be made from a thermoplastic, there are many types of thermoplastics which would be unsuitable as a sealing material. Thermoplastic simply means that the material becomes soft when heated and hard when cooled. Dictionary.com (citing The American Heritage® Dictionary of the English Language, Fourth Edition, Copyright © 2000 by Houghton Mifflin Company). When included amongst materials such as metal and **hard** rubber, it is clear that Hancock discloses a **hard** material. Such materials are unsuitable as sealing materials as they are consequently more resistant to pressure. Application, P. 2, Ln. 25 – P. 3, Ln. 1. Therefore, not only does Hancock fail to disclose a lip with first and second surfaces made of a sealing material, it actually teaches away from Applicants' claim 1 limitation of sealing material located at the first and second surfaces of a lip.

Applicant respectfully asserts that Examiner misidentified the location of the seal in Hancock. Applicant asserts that the seal in Hancock is made between ring member 13 and the plate 4. Hancock, Col. 2, Lns. 58-59. Thus, the only disclosure in Hancock that is possibly related to any sealing material is the disclosure relating to the ring member 13 which consists of band member 19 and collar 20. Hancock, Col. 2, Lns. 43-46. Band member 19 is disclosed as being made from a flexible, spring-like metal or plastic material. Hancock, Col. 2, Lns. 51-53. Such a material only provides for flexibility and does not make it a suitable sealing material as metal is too hard and is consequently more resistant to pressure, and plastic "can be subject to compression set or creep, especially at high temperatures. Thus, these designs should not be considered to create a dependable seal." Application, P. 2 Ln. 23 – P. 3 Lns. 4. Collar 20 includes ridges 21 and 22, and is made of fabric. Hancock, Col. 2, Lns. 53-64. This likewise does not describe a sealing material. Therefore, Hancock fails to disclose any sealing material whatsoever.

It is noted that the Examiner has rejected claims 1-28 pursuant to 35 U.S.C. § 103. However, it is also noted that Examiner has dropped from consideration both the Jensen and Burmeister references cited in Examiner's first office action. While the Examiner has made no reference to the Scriven reference, which was previously cited along with the Jensen and Burmeister references, in the current office action, it is assumed that the Scriven reference has also been dropped from consideration. But, even if the Examiner is considering the teachings of Scriven, the combination of Hancock and Scriven would not render Applicants' claims obvious.

While obviousness may be found by combining references, absent a suggestion to combine the references such combination is inappropriate. It is insufficient that the prior art

discloses the components of the claims sought to be patented. A teaching, suggestion or incentive to make the combination is required for the combination of the art to demonstrate obviousness.

Neither Hancock nor Scriven describe the use of any sealing material. Furthermore, Hancock discloses a radial pressure seal while Scriven discloses a vertical seal. Hancock, Col. 2, Lns. 68-69. This difference in the manner in which the seal is formed would be critical to someone skilled in the art as there are inherent problems, such as compression set or creep, with a vertical pressure seal that are not present to the same extent in a radial pressure seal.

As discussed above, Hancock fails to disclose a filter arrangement with a lip, let alone a lip with a first surface that is capable of resting on a surface edge of the housing. Hancock additionally fails to disclose any sealing material, let alone a sealing material that is an integral part of said lip. Furthermore, even if the Scriven reference was not dropped, Scriven fails to disclose any sealing material as well. Based on all the above remarks Applicants respectfully assert that Examiner has failed to establish a prima facie case of obviousness. Furthermore, in the occurrence that the Scriven reference was not dropped, Applicants respectfully assert that there is no motivation to combine Hancock and Scriven to demonstrate obviousness. It is therefore respectfully requested that Examiner remove the 35 U.S.C. § 103 objection to Claim 1.

Claim 2

Claim 2 is dependent upon Claim 1. As Claim 1 is allowable, so must be Claim 2. In addition, Claim 2 specifies that the sealing material is comprised of an elastomer. Such a material is not disclosed in Hancock or Scriven. Thus, it is impossible to combine Hancock and Scriven in a way that would teach or suggest all the limitations of Claim 2. Furthermore, based on the remarks for Claim 1, there is no motivation to combine Hancock and Scriven to demonstrate obviousness. It is therefore respectfully requested that Examiner remove the 35 U.S.C. § 103 objection to Claim 2.

Claim 3

Claim 3 is dependent upon Claim 1. As Claim 1 is allowable, so must be Claim 3. In addition, Claim 3 specifies that the sealing material is comprised of a thermoplastic elastomer. Such a material is not disclosed in Hancock or Scriven. Thus, it is impossible to combine Hancock and Scriven in a way that would teach or suggest all the limitations of Claim 3. Furthermore, based on the remarks for Claim 1, there is no motivation to combine Hancock and

Scriven to demonstrate obviousness. It is therefore respectfully requested that Examiner remove the 35 U.S.C. § 103 objection to Claim 3.

Claim 4

Claim 4 is dependent upon Claim 1. As Claim 1 is allowable, so must be Claim 4. In addition, Claim 4 specifies that the sealing material is an integral part of the lip. Hancock and Scriven never even disclose a sealing material. Thus, it is impossible to combine Hancock and Scriven in a way that would teach or suggest all the limitations of Claim 4. Furthermore, based on the remarks for Claim 1, there is no motivation to combine Hancock and Scriven to demonstrate obviousness. It is therefore respectfully requested that Examiner remove the 35 U.S.C. § 103 objection to Claim 4.

Claim 5

Claim 5 is dependent upon Claim 1. As Claim 1 is allowable, so must be Claim 5. Furthermore, based on the remarks for Claim 1, there is no motivation to combine Hancock and Scriven to demonstrate obviousness. It is therefore respectfully requested that Examiner remove the 35 U.S.C. § 103 objection to Claim 5.

Claim 6

Claim 6 is dependent upon Claim 1. As Claim 1 is allowable, so must be Claim 6. In addition, Claim 6 specifies that a portion of said sealing material extends from said second surface of said lip in a direction parallel to said lid such that said extended portion is capable of creating a seal against said lid due to internal pressure in the filtering system. The concept of extending the sealing material parallel to the lid is not disclosed in either Hancock or Scriven. In fact, neither Hancock nor Scriven ever even discloses a sealing material. Thus, it is impossible to combine Hancock and Scriven in a way that would teach or suggest all the limitations of Claim 6.

Furthermore, Hancock and Scriven never discuss the internal pressure of their filtering systems, let alone indicate that the internal pressure can be used to assist in sealing the system. Consequently, neither of these patents present a motivation to combine it with the other in such a way as to increase the quality of the seal by utilizing the internal pressure of the filter system. Thus, the Hancock and Scriven can not be combined to demonstrate obviousness. It is therefore respectfully requested that Examiner remove the 35 U.S.C. § 103 objection to Claim 6.

Claim 7

Claim 7 is dependent upon Claim 1. As Claim 1 is allowable, so must be Claim 7. In addition, Claim 7 specifies that said sealing material will be compressed by the lid when the lid is covering the housing. Neither Hancock nor Burmeister disclose a sealing material located adjacent to a lid, let alone a compression of such a sealing material by a lid. In fact, Hancock and Scriven never even disclose a sealing material at all. Moreover, Hancock never discloses a lid. Thus, it is impossible to combine Hancock and Scriven in a way that would teach or suggest all the limitations of Claim 7. Furthermore, based on the remarks for Claim 1, there is no motivation to combine Hancock and Scriven to demonstrate obviousness. It is therefore respectfully requested that Examiner remove the 35 U.S.C. § 103 objection to Claim 7.

Claim 8

Claim 8 is dependent upon Claim 1. As Claim 1 is allowable, so must be Claim 8. Furthermore, based on the remarks for Claim 1, there is no motivation to combine Hancock and Scriven to demonstrate obviousness. It is therefore respectfully requested that Examiner remove the 35 U.S.C. § 103 objection to Claim 8.

Claim 9

Claim 9 is dependent upon Claim 1. As Claim 1 is allowable, so must be Claim 9. Furthermore, based on the remarks for Claim 1, there is no motivation to combine Hancock and Scriven to demonstrate obviousness. It is therefore respectfully requested that Examiner remove the 35 U.S.C. § 103 objection to Claim 9.

Claim 10

Claim 10 is dependent upon Claim 2. As Claim 2 is allowable, so must be Claim 10. Furthermore, based on the remarks for Claim 1, there is no motivation to combine Hancock and Scriven to demonstrate obviousness. It is therefore respectfully requested that Examiner remove the 35 U.S.C. § 103 objection to Claim 10.

Claim 11

Claim 11 is dependent upon Claim 2. As Claim 2 is allowable, so must be Claim 11. In addition, Claim 11 specifies that a portion of said sealing extends from said second surface of said lip in a direction parallel to said lid such that said extended portion is capable of creating a pressure seal against the lid. Hancock and Scriven never discuss such a pressure seal.

Neither is the concept of extending the sealing material parallel to the lid disclosed in either of the two patents. In fact, Hancock and Scriven never even disclose a sealing material. Thus, it is impossible to combine Hancock and Scriven in a way that would teach or suggest all the limitations of Claim 12. Furthermore, based on the remarks for Claim 1 and Claim 6, there is no motivation to combine Hancock and Scriven to demonstrate obviousness. It is therefore respectfully requested that Examiner remove the 35 U.S.C. § 103 objection to Claim 11.

Claim 12

Claim 12 is dependent upon Claim 4. As Claim 4 is allowable, so must be Claim 12. In addition, Claim 12 specifies that a portion of said sealing extends from said second surface of said lip in a direction parallel to said lid such that said extended portion is capable of creating a pressure seal against said lid. Hancock and Scriven never discuss such a pressure seal. Neither is the concept of extending the sealing material parallel to the lid disclosed in either of the two patents. In fact, Hancock and Scriven never even disclose a sealing material. Thus, it is impossible to combine Jensen, Burmeister, and Scriven in a way that would teach or suggest all the limitations of Claim 12. Furthermore, based on the remarks for Claim 1 and Claim 6, there is no motivation to combine Hancock and Scriven to demonstrate obviousness. It is therefore respectfully requested that Examiner remove the 35 U.S.C. § 103 objection to Claim 12.

Claim 13

Claim 13 is dependent upon Claim 1. As Claim 1 is allowable, so must be Claim 13. Furthermore, based on the remarks for Claim 1, there is no motivation to combine Hancock and Scriven to demonstrate obviousness. It is therefore respectfully requested that Examiner remove the 35 U.S.C. § 103 objection to Claim 13.

Claim 14

Included in Claim 14 is a “first lip portion extending away from said body in an **upward and outward direction...**”, a “second lip portion located at the end of said first lip portion, said second lip portion extending away from said first lip portion in a **downward and outward direction**; and sealing material located at the end of said first lip portion **and the end of said second lip portion.**”

As discussed in the remarks for Claim 1, Hancock and Scriven fail to disclose a sealing material. Furthermore, Hancock and Scriven fail to disclose or suggest the upward and

outward configuration of the first lip portion and the downward and outward configuration of the second lip portion of Claim 14.

Thus, it is impossible to combine Hancock and Scriven in a way that would teach or suggest all the limitations of Claim 14. Furthermore, based on the remarks for Claim 1, there is no motivation to combine Hancock and Scriven to demonstrate obviousness. It is therefore respectfully requested that Examiner remove the 35 U.S.C. § 103 objection to Claim 14.

Claim 15

Claim 15 is dependent upon Claim 14. As Claim 14 is allowable, so must be Claim 15. In addition, Claim 15 specifies that the sealing material is comprised of an elastomer. Such a material is not disclosed in Hancock or Scriven. Thus, it is impossible to combine Hancock and Scriven in a way that would teach or suggest all the limitations of Claim 15. Furthermore, based on the remarks for Claim 1, there is no motivation to combine Hancock and Scriven to demonstrate obviousness. It is therefore respectfully requested that Examiner remove the 35 U.S.C. § 103 objection to Claim 15.

Claim 16

Claim 16 is dependent upon Claim 14. As Claim 14 is allowable, so must be Claim 16. In addition, Claim 16 specifies that the sealing material is comprised of a thermoplastic elastomer. Such a material is never mentioned in Hancock or Scriven. Thus, it is impossible to combine Hancock and Scriven in a way that would teach or suggest all the limitations of Claim 16. Furthermore, based on the remarks for Claim 1, there is no motivation to combine Hancock and Scriven to demonstrate obviousness. It is therefore respectfully requested that Examiner remove the 35 U.S.C. § 103 objection to Claim 16.

Claim 17

Claim 17 is dependent upon Claim 14. As Claim 14 is allowable, so must be Claim 17. Furthermore, based on the remarks for Claim 1, there is no motivation to combine Hancock and Scriven to demonstrate obviousness. It is therefore respectfully requested that Examiner remove the 35 U.S.C. § 103 objection to Claim 17.

Claim 18

Claim 18 is dependent upon Claim 14. As Claim 14 is allowable, so must be Claim 18. In addition, Claim 4 specifies that the sealing material is an integral part of the lip.

Hancock and Scriven never even disclose a sealing material. Thus, it is impossible to combine Hancock and Scriven in a way that would teach or suggest all the limitations of Claim 4. Furthermore, based on the remarks for Claim 1, there is no motivation to combine Hancock and Scriven to demonstrate obviousness. It is therefore respectfully requested that Examiner remove the 35 U.S.C. § 103 objection to Claim 18.

Claim 19

Claim 19 is dependent upon Claim 14. As Claim 14 is allowable, so must be Claim 19. In addition, Claim 19 specifies that the sealing material extends away from the end of said first portion in an inwardly direction. The concept of extending the sealing material inwardly is not disclosed in Hancock or Scriven. Neither of the two references ever even discloses a sealing material. Thus, it is impossible to combine Jensen, Burmeister, and Scriven in a way that would teach or suggest all the limitations of Claim 19. Furthermore, based on the remarks for Claim 1, there is no motivation to combine Hancock and Scriven to demonstrate obviousness. It is therefore respectfully requested that Examiner remove the 35 U.S.C. § 103 objection to Claim 19.

Claim 20

Claim 20 is dependent upon Claim 14. As Claim 14 is allowable, so must be Claim 20. In addition, Claim 20 specifies that the location where said second portion extends from said first portion comprises of a flat surface. Hancock and Scriven fail to disclose or suggest the first lip portion and second lip portion configuration of Claim 14, let alone the flat surface configuration of Claim 20. Thus, it is impossible to combine Hancock and Scriven in a way that would teach or suggest all the limitations of Claim 20. Furthermore, based on the remarks for Claim 1, there is no motivation to combine Hancock and Scriven to demonstrate obviousness. It is therefore respectfully requested that Examiner remove the 35 U.S.C. § 103 objection to Claim 20.

Claim 21

Claim 21 is dependent upon Claim 14. As Claim 14 is allowable, so must be Claim 15. Furthermore, based on the remarks for Claim 1, there is no motivation to combine Hancock and Scriven to demonstrate obviousness. It is therefore respectfully requested that Examiner remove the 35 U.S.C. § 103 objection to Claim 21.

Claim 22

Included in Claim 22 is a “sealing material located where said lip contacts said housing and said lid.” As discussed in the remarks for Claim 1, Hancock and Scriven discloses no sealing material whatsoever. In addition, Hancock never even discloses a lid. Thus, it is impossible to combine Hancock and Scriven in a way that would teach or suggest all the limitations of Claim 22. Furthermore, based on the remarks for Claim 1, there is no motivation to combine Hancock and Scriven to demonstrate obviousness. It is therefore respectfully requested that Examiner remove the 35 U.S.C. § 103 objection to Claim 22.

Claim 23

Claim 23 is dependent upon Claim 22. As Claim 22 is allowable, so must be Claim 23. In addition, Claim 23 specifies that the sealing material is comprised of an elastomer. Such a material is not disclosed in Hancock or Scriven. Thus, it is impossible to combine Hancock and Scriven in a way that would teach or suggest all the limitations of Claim 23. Furthermore, based on the remarks for Claim 1, there is no motivation to combine Hancock and Scriven to demonstrate obviousness. It is therefore respectfully requested that Examiner remove the 35 U.S.C. § 103 objection to Claim 23.

Claim 24

Claim 24 is dependent upon Claim 22. As Claim 22 is allowable, so must be Claim 24. In addition, Claim 24 specifies that the sealing material is comprised of a thermoplastic elastomer. Such a material is not disclosed in Hancock or Scriven. Thus, it is impossible to combine Hancock and Scriven in a way that would teach or suggest all the limitations of Claim 24. Furthermore, based on the remarks for Claim 1, there is no motivation to combine Hancock and Scriven to demonstrate obviousness. It is therefore respectfully requested that Examiner remove the 35 U.S.C. § 103 objection to Claim 24.

Claim 25

Claim 25 is dependent upon Claim 22. As Claim 22 is allowable, so must be Claim 25. Furthermore, based on the remarks for Claim 1, there is no motivation to combine Hancock and Scriven to demonstrate obviousness. It is therefore respectfully requested that Examiner remove the 35 U.S.C. § 103 objection to Claim 25.

Claim 26

Claim 26 is dependent upon Claim 22. As Claim 22 is allowable, so must be Claim 26. Furthermore, based on the remarks for Claim 1, there is no motivation to combine Hancock and Scriven to demonstrate obviousness. It is therefore respectfully requested that Examiner remove the 35 U.S.C. § 103 objection to Claim 26.

Claim 27

Claim 27 is dependent upon Claim 22. As Claim 22 is allowable, so must be Claim 27. In addition, Claim 27 specifies that said sealing extends away from said lip in a direction parallel to said lid and in contact with said lid to create a pressure seal against said lid. Hancock and Scriven never discuss such a pressure seal. Neither is the concept of extending the sealing material parallel to the lid disclosed in either reference. Hancock and Scriven never even disclose a sealing material. Thus, it is impossible to combine Hancock and Scriven in a way that would teach or suggest all the limitations of Claim 27. Furthermore, based on the remarks for Claim 1 and Claim 6, there is no motivation to combine Hancock and Scriven to demonstrate obviousness. It is therefore respectfully requested that Examiner remove the 35 U.S.C. § 103 objection to Claim 27.

Claim 28

Claim 28 is dependent upon Claim 22. As Claim 22 is allowable, so must be Claim 28. In addition, Hancock never even discloses a lid. Furthermore, based on the remarks for Claim 1, there is no motivation to combine Hancock and Scriven to demonstrate obviousness. It is therefore respectfully requested that Examiner remove the 35 U.S.C. § 103 objection to Claim 28.

As related above in the discussions for each individual claim, it is respectfully asserted that the Examiner has failed to show that the references relied upon teach or suggest all of the limitations of the claims. It is also respectfully asserted that the Examiner has failed to display that there is any motivation, other than hindsight itself, for combining the references in the manner suggested by the Examiner. Therefore, Applicants respectfully assert that the Examiner has not satisfied the Examiner's burden of establishing a prima facie case of obviousness under 35 U.S.C. § 103.

Based upon the above remarks, Applicant respectfully requests reconsideration of this application and its early allowance. Should the Examiner feel that a telephone conference with

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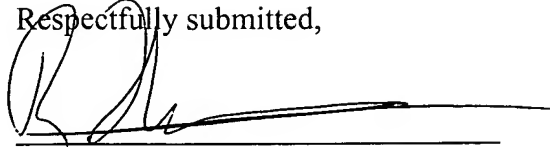
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Applicants' attorney would expedite the prosecution of this application, the Examiner is urged to contact him at the number indicated below.

Date: _____

5/27/05

Respectfully submitted,



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